

## WHAT IS CLAIMED IS:

1 1. A method of in circuit emulation of an integrated  
2 circuit including a digital data processor capable of  
3 executing program instructions, comprising the steps of:  
4 detecting a predetermined debug event;  
5 upon detection of said predetermined debug event  
6 suspending program execution except for at least one type  
7 interrupt; and  
8 executing an emulation monitor program via said at least  
9 one type interrupt.

1 2. The method of claim 1, wherein the integrated circuit  
2 includes a serial scan path for control of the state of the  
3 integrated circuit, said method further comprising the steps  
4 of:  
5 selectively assigning at least one emulation resource of  
6 the integrated circuit to one of said serial scan path or said  
7 monitor program.

1 3. The method of claim 2, wherein the integrated circuit  
2 includes a monitor privilege input, said method wherein:  
3 said step of selectively assigning emulation resources of  
4 the integrated circuit assigns said emulation resources to  
5 said serial scan path upon a first digital state of said  
6 monitor privilege input and assigns said emulation resources  
7 to said emulation monitor program upon a second digital state  
8 of said monitor privilege input.

1 4. The method of claim 2, the emulation resources  
2 include at least one read write data register, said method  
3 further comprising:

4        said step of selectively assigning emulation resources of  
 5        the integrated circuit includes accessing said at least one  
 6        read write data register.

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